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ART 101-101-003

NO. 3595 P. 2

Amendments to the Claims

Claims 1-9 (Cancelled)

10. (Currently Amended) A tuning-fork type vibration gyro having comprising:
a ferroelectric tuning-fork vibration body generating a sensor signal; and
 a sensor circuit to which [[a]] the sensor signal generated by [[a]] the tuning-fork
type vibration body is input, said sensor circuit comprising including:
a differential amplifier having two input terminals between to which said
sensor signal is input; and
a capacitor or a voltage limiting element being connected between the two
input to terminals of said differential amplifier.

11. (Currently Amended) The tuning-fork type vibration gyro according to
 claim 10 wherein each of said voltage limiting elements element is a Zener diode[[.]]
~~and said and said Zener diode, said capacitor and said differential amplifier are~~
~~integrated into one piece.~~

12. (Currently Amended) A tuning-fork type vibration gyro having comprising:
a ferroelectric tuning-fork vibration body generating a sensor signal; and
 a sensor circuit to which [[a]] the sensor signal generated by [[a]] the tuning-fork
type vibration body is input, said sensor circuit comprising including:
a differential amplifier having two input terminals between to which said
sensor signal is input; and

two inductors, each being connected in series to each of the input terminals of said differential amplifier.

13. (Currently Amended) The tuning-fork type vibration gyro according to claim 10, 12, 18 or 19, wherein said differential amplifier ~~comprises~~ is formed in an integrated circuit and includes:

a first stage transistor having two transistors being differentially connected;
succeeding stages having transistors connected to the first stage; and
[[a]] guard electrodes, each surrounding each of the two transistors of the first stage and being connected to a ground potential, that prevent pyroelectric noise from flowing from the transistors of the first stage to the transistors of the succeeding stages
~~electrode for separating said first stage transistor from transistors in succeeding stages.~~

14. (Canceled)

15. (Currently Amended) The [[A]] tuning-fork type vibration gyro according to claim 10, 12, 18 or 19, comprising:

wherein [[a]] the tuning-fork type vibration body has having two arms disposed in parallel and a base for commonly supporting one end of said each arm, wherein a longitudinal direction of said two arms being is defined as a z-axis and a perpendicular direction to the two arms being thereto is defined as an x-axis,[[:]] and further comprising:

a sensor circuit to which the ~~[[a]]~~ sensor signal generated by said tuning-fork type vibration body is input;~~[[.]]~~

~~wherein said tuning-fork type vibration body further comprises:~~

driving electrodes respectively formed on said two arms for generating vibration of said two arms in a direction parallel to said x-axis;

detecting electrodes respectively formed on said two arms for detecting electromotive force generated when said tuning-fork type vibration body rotates around said z-axis; and

dummy electrodes formed on said two arms in respective areas different from said driving electrodes and said detecting electrodes~~[[.]]~~ and,

~~said sensor circuit comprises:~~

~~a differential amplifier to which said sensor signal is input; and~~

~~a capacitor or a voltage-limiting element being connected to input terminals of said differential amplifier.~~

16. (Withdrawn) An electrode trimming method for a tuning-fork type vibration gyro having two or more arms and a base for supporting said arms, driving electrodes and/or detecting electrodes respectively formed on said arms, and a support substrate for supporting said tuning-fork type vibration body on said base, said electrode trimming method comprising the steps of:

when defining a parallelly disposed direction of said arms as an x-axis, suppressing vibration of said support substrate while vibration of said arms in a direction

parallel to said x-axis is excited by a predetermined drive power applied to said driving electrodes; and

adjusting areas of said detecting electrodes so that a sensor signal output from said detecting electrodes is decreased.

17. (Withdrawn) The electrode trimming method for the tuning-fork type vibration gyro according to claim 16,

wherein said vibration of the support substrate is suppressed by a pressing jig formed of a rubbery elastic body.

18. (New) A tuning-fork vibration gyro comprising:
a ferroelectric tuning-fork vibration body generating a sensor signal; and
a sensor circuit to which the sensor signal generated by the tuning-fork vibration body is input, said sensor circuit including:

a differential amplifier having two input terminals between which said sensor signal is input; and

two capacitors, each having one end connected to a respective one of the two input terminals of the differential amplifier and a second end commonly connected to a ground potential.

19. (New) A tuning-fork vibration gyro comprising:
a ferroelectric tuning-fork vibration body generating a sensor signal; and

a sensor circuit to which the sensor signal generated by the tuning-fork vibration body is input, said sensor circuit including:

a differential amplifier having two input terminals between which said sensor signal is input; and

two voltage limiting elements, each having one end connected to a respective one of the two input terminals of the differential amplifier and a second end commonly connected to a ground potential.

Facsimile

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Pages (including cover): 2

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Client Matter #: 108066-00088

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571-273-1630

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MESSAGE/INSTRUCTIONS**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Confirmation No.: 8111

OHTA et al.

Art Unit: 2856

Serial No.: 10/625,568

Examiner: J. Chapman, Jr.

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Docket No.: 108066-00088

For: TUNING-FORK TYPE VIBRATION GYRO AND ELECTRODE TRIMMING
METHOD THEREFOR

Dear Ms. Surles,

In accordance with our telephone conversation of November 23, 2004, attached hereto is a new page 2 of the Response to the Notice of Non-Compliant Amendment filed on November 12, 2004. Thank you for your assistance in this matter.

Very truly yours,

Michele L. Connell
Reg. No. 52,763

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